

**REMARKS**

In the Office Action, the Examiner rejected claims 1-50. For the reasons provided below, the Applicants respectfully request allowance of all pending claims.

**Rejection Under 35 U.S.C. § 102**

In the Office Action, the Examiner rejected claims 1-50 under 35 U.S.C. § 102(e) as being anticipated by Reid (U.S. Patent No. 5,982,614).

***Legal Precedent***

First, Applicants remind the Examiner that, during patent examination, the pending claims must be given an interpretation that is reasonable and consistent with the specification. *See In re Prater*, 415 F.2d 1393, 1404-05, 162 U.S.P.Q. 541, 550-51 (C.C.P.A. 1969); *see also In re Morris*, 127 F.3d 1048, 1054-55, 44 U.S.P.Q.2d 1023, 1027-28 (Fed. Cir. 1997); *see also* M.P.E.P. §§ 608.01(o) and 2111. Interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. *See In re Cortright*, 165 F.3d 1353, 1359, 49 U.S.P.Q.2d 1464, 1468 (Fed. Cir. 1999); *see also* M.P.E.P. § 2111. As further explained in Section 2111.01 of the M.P.E.P., the words of the claim must be given their plain meaning unless the applicant has provided a clear definition in the specification. *See In re Zletz*, 893 F.2d 319, 321, 13 U.S.P.Q.2d 1320, 1322 (Fed. Cir. 1989). Again, the plain meaning refers to an interpretation by those of ordinary skill in the art. *See In re Sneed*, 710 F.2d 1544, 218 U.S.P.Q. 385 (Fed. Cir. 1983).

Second, anticipation under section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under section 102, a single reference must teach each and every limitation of the

rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Accordingly, the Applicants need only point to a single element not found in the cited reference to demonstrate that the cited reference fails to anticipate the claimed subject matter. The prior art reference also must show the *identical* invention “*in as complete detail as contained in the . . . claim*” to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989).

Third, if the Examiner relies on a theory of inherency, the extrinsic evidence must make clear that the missing descriptive matter is *necessarily* present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. *In re Robertson*, 169 F.3d 743, 49 U.S.P.Q.2d 1949 (Fed. Cir. 1999) (Emphasis Added). The mere fact that a certain thing *may* result from a given set of circumstances is not sufficient. *Id.* In relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art. *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). The Examiner, in presenting the inherency argument, bears the evidentiary burden and must adequately satisfy this burden. *See id.* Regarding functional limitations, the Examiner must evaluate and consider the functional limitation, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used. *See* M.P.E.P. § 2173.05(g); *In re Swinehart*, 169 U.S.P.Q. 226, 229 (C.C.P.A. 1971); *In re Schreiber*, 44 U.S.P.Q.2d 1429, 1432 (Fed. Cir. 1997). If the Examiner believes the functional limitation to be inherent in the cited reference, then the Examiner “must provide some evidence or scientific reasoning to establish the reasonableness of the examiner’s belief that the functional limitation is an inherent characteristic of the prior art.” *Ex parte Skinner*, 2 U.S.P.Q.2d 1788, 1789 (Bd. Pat. App. & Inter. 1986).

Fourth, the *drawings* of the cited reference must be evaluated for what they *reasonably disclose and suggest* to one of ordinary skill in the art. *In re Aslanian*, 590 F.2d 911, 200 U.S.P.Q. 500 (CCPA 1979).

***Omitted Features of Independent Claim 1***

Turning to the claims, independent claim 1 recites a port configuration system for a computing device, comprising, *inter alia*, “a plurality of connectors *disposed adjacent* the plurality of ports, wherein *at least two ports* of the plurality of ports *share a common connector* of the plurality of connectors.”

In the Office Action, the Examiner asserted that Reid teaches “a plurality of connectors disposed adjacent the plurality of ports, wherein at least two ports of the plurality of ports share a common connector of the plurality of connectors (see col. 7, lines 44-64, Fig. 3).” Paper No. 5, ¶ 4. In addition, the Examiner responded to the Applicants’ previous arguments, stating:

In response, the examiner’s cited references Reid teach the invention as claimed. Reid teaches a plurality of ports (ports 132 . . .) And each port has to have a connection devices attached (such as a connector or adaptor) to associate with communication with other devices, therefore, each connector has disposed adjacent to the port to connect with the cable to other device (see Fig 1).

Paper No. 5, ¶ 6.

The Applicants respectfully traverse the Examiner’s arguments. The Reid reference does not teach or suggest that “*at least two ports* of the plurality of ports *share a common connector* of the plurality of connectors,” as recited by independent claim 1. In sharp contrast, the Reid reference discloses a plurality of independent and distinct input/output ports separately disposed on a desktop computer 110, a portable computer 120, a docking means 200, and various peripheral devices 130. *See* Reid, Figs. 1-3; Col. 4,

lines 1-3, 33-49; Col. 5, lines 17-37. However, none of the desktop computer 110, portable computer 120, docking means 200, or peripheral devices 130 has a shared connector disposed adjacent at least two ports on these respective devices. Instead, the various input/output ports disposed on these devices appear to be conventional ports, which have their own independent and separate connectors. *See Reid*, Col. 5, lines 17-37. Therefore, the Reid reference fails to teach or suggest that “*at least two ports of the plurality of ports share a common connector of the plurality of connectors,*” as recited by independent claim 1.

In the Examiner’s response to arguments set forth above, the Examiner apparently believes that the terminators disposed on the first and second ends of the cable 300 represent the connectors recited by the instant claim. Again, the Applicants respectfully traverse the Examiner’s argument. First, the terminators of the cable 300 are not disposed adjacent at least two ports, as recited by the instant claim. *See Reid*, Figs. 1-3. In contrast, the terminators of the cable 300 are all completely separate from the desktop computer 110, the portable computer 120, the docking means 200, and the peripheral devices 130.

Second, not one of the terminators of the cable 300 is shared by at least two ports disposed on the various devices. For example, the terminator 310 disposed on the second end 312 of the cable 300 is insertable only into a 50-pin socket 210 of the docking means 200. *See Reid*, Figs. 2-3; Col. 6, line 66 – Col. 7, line 2; Col. 7, lines 18-28. The terminator 310 cannot be shared with any other input/output ports 230 disposed on the docking means 200. Similarly, the terminators 322, 324, 326, and 328, disposed on the second end 320 of the cable 300, are each individually insertable into one single input/output port 112 disposed on the desktop computer 110. *See Reid*, Figs. 1 and 3; Col. 6, lines 57-65. Again, not one of these terminators 322, 324, 326 or 328, can be shared by any two input/output ports 112 on the desktop computer 110. Although the multiple different terminators 322, 324, 326 and 328 on the first end 320 of the cable 300 lead to a single

terminator 310 disposed on the second end 312 of the cable 300, the single terminator 310 is never disposed adjacent the multiple ports 112 of the desktop computer 110. *See Reid, Figs. 1-3.* Therefore, the terminator 310 is not *disposed adjacent* the plurality of input/output ports 110 and, also, *shared* by the plurality of input/out ports 112. Accordingly, the Applicants reiterate that the Reid reference fails to teach or suggest that “*at least two ports* of the plurality of ports *share a common connector* of the plurality of connectors,” as recited by the independent claim 1.

For these reasons, the Reid reference fails to anticipate independent claim 1 and its respective dependent claims.

***Omitted Features of Dependent Claim 14***

Dependent claim 14 recites, *inter alia*, “*each of the at least two ports has two of the connectors, one of which is the common connector.*” Again, the Applicants emphasize that the Reid reference does not disclose a *common* connector. In fact, the Reid reference discloses conventional input/output ports such as a monitor port, a keyboard port, a mouse port, a serial interface port, a parallel port, a small computer system interface port, a personal computer memory card international association interface port, and so forth. *See Reid, Col. 5, lines 17-37.* The Reid reference does not disclose any special or modified configuration of these ports, but rather these ports are conventional configurations having their own *unshared* connectors. Thus, not one of the input/output ports disclosed by Reid actually has two connectors, one of which is a common connector, as recited by dependent claim 14. In view of this deficiency, the Reid reference cannot anticipate dependent claim 14.

***Omitted Features of Dependent Claim 15***

Dependent claim 15 recites, *inter alia*, “*the common connector is configured for mutually exclusive use by one port of the at least two ports for coupling the one port to a desired electronic device.*” Applicants reiterate that the Reid reference does not teach or

suggest a common connector disposed adjacent at least two ports, as recited by independent claim 1. In addition, the terminator 310 of the cable 300 cannot be interpreted as a common connector disposed adjacent at least two ports, as recited by independent claim 1. Even though the terminator 310 is connected to multiple terminators 322, 324, 326, and 328 at the first end 320 of the cable 300, the cable 300 is not configured for mutually exclusive use of the terminator 310 by a single port. In fact, the multiple terminators 322, 324, 326, and 328 are clearly limited to simultaneous use by multiple input/output ports 112 of the desktop computer 110. *See Reid*, Figs. 1 and 3; Col. 6, 57-65. Thus, not only is the terminator 310 not a common connector adjacent at least two ports as recited in claim 1, but the multi-terminator configuration at the first end 320 of the cable 300 also fails to meet the recitations of dependent claim 15. In view of these deficiencies, the Reid reference cannot anticipate dependent claim 15.

***Omitted Features of Dependent Claim 16***

Dependent claim 16 recites, *inter alia*, the plurality of connectors comprise *threaded receptacles* configured to receive screw members adjacent a *communication cable*.” In addition to a clear lack of a common connector adjacent at least two ports, as recited in claim 1, the Applicants respectfully stress that Reid is absolutely devoid of any teaching or suggestion of connectors having threaded receptacles, as recited by claim 16. The Applicants reiterate that Reid teaches only conventional input/output ports, such as serial, parallel, and monitor ports. As recognized by one of ordinary skill in the art, conventional input/output ports have *unshared* threaded receptacles disposed on opposite sides of the input/output ports, such that screw members adjacent terminators of a cable may be threaded therein to connect the cable 300 to the input/output port. Therefore, The Applicants stress that the cable 300 and its terminators 310, 322, 324, 326, and 328 cannot represent the connectors having threaded receptacles, as recited by claim 16. In view of this deficiency, the Reid reference cannot anticipate claim 16.

***Omitted Features of Independent Claim 17***

Independent claim 17 recites, *inter alia*, “a plurality of connectors *disposed on the communication panel* adjacent the plurality of ports, wherein the at least two ports *share a common connector of the plurality of connectors*.” For the reasons discussed in detail above, the Reid reference cannot anticipate claim 17. First, the Reid reference does not even mention any particular type or configuration of connectors disposed on the desktop computer 110, the portable computer 120, the docking means 200, or the peripheral devices 130. The Reid reference simply discloses conventional input/output ports, such as monitor, keyboard, and mouse ports, which do not have any shared or common connector. Given that the common connector is actually *disposed on the communication panel*, the Applicants respectfully emphasize that the cable 300 and its terminators 322, 324, 326, 328 and 310 cannot be interpreted as the connectors set forth by claim 17. These terminators are clearly separate from any sort of communication panel on the desktop computer 110, the portable computer 120, and so forth. In view of these deficiencies, the Reid reference cannot anticipate independent claim 17 or its respective dependent claims.

***Omitted Features of Dependent Claim 22***

Dependent claim 22 recites, *inter alia*, “at least one of the plurality of ports comprises a plurality of parallel conductors *configured for coupling with a communication cable via a plug at an end of the communication cable*.” Here, the claim recitations clearly indicate that the communication cable and its respective plug are completely separate from the ports and connectors disposed on the communication panel of claim 17. Therefore, the Applicants reiterate that the Reid reference discloses only conventional input/output ports that do not have any shared or common connector, and the cable 300 and its respective terminators are completely separate from these various input/output ports. In view of these deficiencies, the Reid reference cannot anticipate claim 22.

***Omitted Features of Dependent Claim 26***

Dependent claim 26 recites, *inter alia*, “the at least two ports comprise first and second port types configured for *mutually exclusive* communication with an external device via a *communication connector* adapted to one of the first and second port types.” As discussed above with reference to dependent claim 15, the Reid reference does not teach or suggest mutually exclusive communication via a communication connector. In sharp contrast, each of the input/output ports disclosed by Reid has a conventional configuration, such that each of the input/output ports can *simultaneously* (not mutually exclusively) communicate with an external device. Regarding the cable 300 disclosed by Reid, the Applicants reiterate that the multiple terminators 322, 324, 326, and 328 are simultaneously connected to input/output ports 112 of the desktop computer 110, such that the desktop computer 110 can communicate with the docking means 200 through the terminator 310. However, not one of these input/output ports 112 or terminators 322, 324, 326, and 328 is configured for mutually exclusive communication with an external device, such as the docking means 200. In view of these deficiencies, the Reid reference cannot anticipate dependent claim 26.

***Omitted Features of Dependent Claim 27***

Dependent claim 27 recites, *inter alia*, “each of the at least two ports *has two* of the connectors, one of which is the common connector.” Here again, as discussed in detail above with reference to dependent claim 14, not one of the input/output ports disclosed by Reid actually has a *common connector*, much less a common connector that is *disposed on* the communication panel with at least two ports, as recited by claim 17. In view of these deficiencies, the Reid reference cannot anticipate dependent claim 27.

***Omitted Features of Independent Claim 28***

Independent claim 28 recites, *inter alia*, “a *common connector disposed on* the portable computing device *between* the first and second communication ports.” Again, the Applicants reiterate that the Reid reference does not teach or suggest a *common connector*. In



addition, the Reid reference actually fails to disclose a common connector that is actually disposed *between* first and second communication ports, as recited by claim 28. In fact, the cited reference does not teach anything, much less a common connector, that is disposed between the various input/output ports on the desktop computer 110, the portable computer 120, the docking means 200, or the peripheral devices 130. Therefore, even if the terminators on the cable 300 were disposed in the various input/output ports, these terminators would never be disposed *between* the adjacent input/output ports. Moreover, the terminators on the cable 300 are clearly not *disposed on* the portable computing device, as set forth by claim 28. In view of these deficiencies, the Reid reference cannot anticipate claim 28.

***Omitted Features of Dependent Claim 31***

Dependent claim 31 recites, *inter alia*, “the first and second communication ports comprise first and second port types configured for *mutually exclusive* communication with an external device via a *communication connector* adapted to one of the first and second port types.” For the reasons discussed above with reference to dependent claims 15 and 26, the Reid reference also fails to teach or suggest *mutually exclusive* communication using a communication connector. The input/output ports and cable configuration of Reid are clearly limited to *simultaneous* communication, rather than *mutually exclusive* communication, between various computers and devices. In view of these deficiencies, the Reid reference cannot anticipate claim 31.

***Omitted Features of Dependent Claim 33***

Dependent claim 33 recites, *inter alia*, “each of the first and second ports *has two* adjacent connectors disposed on the portable computing device, one of the two adjacent connectors being the common connector.” For the reasons discussed above with reference to dependent claims 14 and 27, the Applicants emphasize that Reid does not anticipate dependent claim 33.

***Omitted Features of Independent Claim 34***

Independent claim 34 recites:

A method of configuring ports for communication between electronic devices, comprising:  
*disposing* a plurality of communication ports *on* a first electronic device;  
*locating* a plurality of connectors *on* the first electronic device adjacent the plurality of communication ports;  
positioning the plurality of communication ports adjacent one another; and  
*deploying a single connector* of the plurality of connectors *between* the plurality of communication ports *for sharing* among the plurality of communication ports.

Here again, claim 34 recites *both* the communication ports and the connectors actually *disposed on* the first electronic device. In addition, claim 34 recites the single connector actually *disposed between* the ports for sharing among those ports. In sharp contrast, the Reid reference does not disclose a *single connector for sharing* among ports, much less a connector that is actually disposed *between* those ports. Instead, the Reid reference discloses a variety of *independent and distinct* input/output ports, which have conventional connector configurations that are *unshared* among the input/output ports. Moreover, the terminators of the cable 300 cannot be disposed between the various input/output ports, because those terminators are limited to direct insertion into one of the respective input/output ports. In view of these deficiencies, the Reid reference cannot anticipate independent claim 34.

***Omitted Features of Dependent Claim 38***

Dependent claim 38 recites, *inter alia*, “forming *threaded receptacles* in at least one of the plurality of connectors for mating with screw members of a *communication linkage*.” Again, for the reasons discussed above with reference to claim 16, the Reid reference does not teach or suggest threaded receptacles in at least one of the plurality of connectors. The Reid reference simply discloses a variety of conventional input/output

ports and separate terminators on the cable 300. *See Reid*, Figs. 1 and 3; Col. 5, lines 17-37; Col. 6, lines 57-65. In view of this deficiency, the Reid reference cannot anticipate dependent claim 38.

***Omitted Features of Dependent Claim 39***

Dependent claim 39 recites, *inter alia*, “positioning the single connector comprises *eliminating a number of connectors*, the number being equal to one less than the plurality of communication ports.” In sharp contrast, the cited reference does not teach or suggest eliminating any connectors that are disposed adjacent communication ports on an electronic device, as set forth by claim 34. Again, the Applicants reiterate that the input/output ports of Reid are conventional ports having separate connectors. *See Reid*, Figs. 1 and 3; Col. 5, lines 17-37; Col. 6, lines 57-65. Therefore, the Reid reference does not teach or suggest eliminating any of these separate connectors. In view of these deficiencies, the Reid reference cannot anticipate dependent claim 39.

***Omitted Features of Dependent Claim 40***

Dependent claim 40 recites, *inter alia*, “positioning the single connector comprises *reducing spacing between the plurality of communication ports*.” In addition to the complete lack of any shared connector between communication ports, as recited by claim 34, the Applicants emphasize the failure of Reid to teach or suggest any space-reducing techniques for the input/output ports disposed on the desktop computer 110, the portable computer 120, the docking means 200, or the peripheral devices 130. In view of this deficiency, the cited reference cannot anticipate dependent claim 40.

***Omitted Features of Dependent Claim 41***

Dependent claim 41 recites, *inter alia*, “reducing spacing between the plurality of communication ports comprises *reducing a dimension of the computing device*.” For the reasons discussed above with reference to independent claim 34 and dependent claim 40, the cited reference fails to anticipate the instant claim. In addition, the Reid reference

does not teach or suggest reducing a dimension of the computing device. In fact, desktop computer 110 and the portable computer 120 of Reid appear to be typical dimensions of those respective devices. In view of this deficiency, the Reid reference cannot anticipate dependent claim 41.

***Omitted Features of Dependent Claim 42***

Dependent claim 42 recites, *inter alia*, “reducing spacing between the plurality of communication ports comprises *reducing a dimension of a circuit board* for the computing device.” Again, for the reasons discussed above with reference to claims 34, 40 and 41, the Reid reference cannot anticipate the instant claim. Specifically, the Reid reference does not teach or suggest any reduction of a dimension of a circuit board disposed in any of these devices. In view of this deficiency, the cited reference fails to anticipate dependent claim 42.

***Omitted Features of Independent Claim 43***

Independent claim 43 recites:

A method of minimizing space requirements for a plurality of input/output ports for a portable computing device, comprising:  
*disposing* first and second ports *on* the portable computing device,  
wherein the first and second ports *have* connector members  
*for coupling with an input/ output cable*,  
positioning the first and second ports adjacent one another; and  
*sharing* one of the connector members *between* the first and second ports.

In contrast to the instant claim, the Reid reference does not disclose a portable computing device having both ports and connector numbers, which facilitate coupling with an input/output cable. The Reid reference is completely devoid of any sort of connector members for the input/output ports disposed on the desktop computer 110, the portable computer 1209, the docking means 200, and so forth. In addition, the Reid reference does not teach or suggest any sort of *sharing* of connector members *between* first

and second ports, as recited by claim 43. In fact, the Reid reference does not disclose any structure, much less a connector, which is actually positioned *between* the various input/output ports. In view of these deficiencies, the Reid reference cannot anticipate independent claim 43 and its respective dependent claims.

***Omitted Features of Dependent Claim 48***

Dependent claim 48 recites, *inter alia*, “sharing comprises *eliminating one of the connector members*.” For the reasons discussed above with reference to claim 39, the Reid reference cannot anticipate dependent claim 48. Specifically, the Reid reference does not disclose eliminating any connector members disposed between input/output ports, as set forth by claim 48. In fact, the Reid reference does not appear to eliminate any connector associated with the input/output ports. In view of this deficiency, the Reid reference fails to anticipate dependent claim 48.

***Omitted Features of Dependent Claim 49***

Dependent claim 49 recites, *inter alia*, “sharing comprises *reducing spacing between the first and second ports*.” Again, for the reasons discussed above with reference to claim 40, the cited reference fails to teach or suggest space reduction between the various input/output ports. In view of this deficiency, the cited reference cannot anticipate claim 49.

***Omitted Features of Dependent Claim 50***

Dependent claim 50 recites, *inter alia*, “reducing spacing between the first and second ports comprises *reducing a dimension of the first electronic device*.” As explained above with reference to claims 41 and 42, the Reid reference does not teach or suggest any dimensional reduction of an electronic device, as recited by the instant claim. Therefore, in view of this deficiency, the Reid reference cannot anticipate dependent claim 50.

**Request Withdrawal of Claim Rejections**

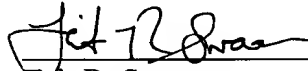
For the reasons discussed in detail above, the Applicants respectfully stress that the Reid reference does not teach or suggest the unique features recited by each of the instant claims. Therefore, Applicants request that the Examiner withdraw all outstanding rejections of claims 1-50 under 35 U.S.C. § 102.

**Conclusion**

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

Date: March 1, 2004

  
Frit R. Swanson  
Reg. No. 48,226  
(281) 970-4545

**CORRESPONDENCE ADDRESS**  
**HEWLETT-PACKARD COMPANY**  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400